## PATENT COOPERATION IREATY

18 FEB 2005

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

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NOV 02 2004

SYATTOMEY

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY **EXAMINATION REPORT** 

(PCT Rule 71.1)

Date of mailing

(day/month/year)

29.10.2004

Applicant's or agent's file reference

International application No.

PCT/US 03/34736

AD6926PCT

International filing date (day/month/year)

29.10.2003

Priority date (day/month/year)

29.10.2002

IMPORTANT NOTIFICATION

Applicant

E.I. DU PONT DE NEMOURS AND COMPANY et al.

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:

European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465

Authorized Officer

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### PATENT COOPERATION TREATY







## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicable or contlette reference						
Applicant's or agent's file reference AD6926PCT	FOR FURTHER A	FOR FURTHER ACTION  See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)				
International application No. PCT/US 03/34736	International filing date 29.10.2003	(day/month/year)	Priority date (day/month/year) 29.10.2002			
International Patent Classification (IPC) o	r both national classification a	and IPC				
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Applicant  E.I. DU PONT DE NEMOURS AN	ID COMPANY at al					
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This international preliminary e.     Authority and is transmitted to to	xamination report has bee	n prepared by this Ir Article 36	nternational Preliminary Examining			
Authority and is transmitted to t	The applicant according to	7.11.10.000				
2. This REPORT consists of a total	al of 6 sheets, including the	nis cover sheet.				
	and the AMMEVEO in	abasta of the decer	otion oloimo and bridge, vince which have			
been amended and are the	panied by ANNEXES, i.e. ne basis for this report and ion 607 of the Administrat	lor sheets containing	ption, claims and/or drawings which have grectifications made before this Authority er the PCT).			
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These annexes consist of a total	al of sheets.					
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3. This report contains indications	relating to the following it	ems:				
	<i>.</i>					
│ │ │ │ │ │ │ │ │ │ │ │ │ │ │ │ │ │ │		•				
II □ Priority			and industrial applicability			
	· · · · · · · · · · · · · · · · · · ·	overty, inventive step	p and industrial applicability			
IV ☐ Lack of unity of inve		ith rogard to novelty	inventive step or industrial applicability;			
citations and explar	nations supporting such st	atement	inventive step of industrial applicability,			
VI   Certain documents	cited					
VII   Certain defects in the	ne international application	ı · · ·				
VIII Certain observation	s on the international appl	ication				
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Date of submission of the demand		Date of completion of	f this report			
04.05.0004	•					
21.05.2004		29.10.2004				
Name and mailing address of the internat	ional	Authorized Officer				
preliminary examining authority:			gratice as Palence, E			
European Patent Office D-80298 Munich		Lindner, T				
Tel. +49 89 2399 - 0 Tx: 52 Fax: +49 89 2399 - 4465	3656 epmu d	Telephone No. +49 8	9 2399-8976			
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# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US 03/34736

I.	Bas	sis	of	the	report	t
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1. With regard to the **elements** of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):

	Des	scription, Pages		•	. •			
	1-8		as originally filed					
	Cla	ims, Numbers						
	1-26	6	as originally filed					
				• •				
	Dra	wings, Sheets			•			
	1/2-	2/2	as originally filed					
2.	With	With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.						
•	These elements were available or furnished to this Authority in the following language: , which is:							
		the language of a translat	ion furnished for the purposes of t	he international sea	arch (under Rule	23.1(b)).		
		the language of publication	on of the international application (	under Rule 48.3(b))				
		the language of a translat Rule 55.2 and/or 55.3).	ion furnished for the purposes of i	nternational prelimin	nary examinatior	ı (under		
3.	Witl inte	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:						
		contained in the internation	onal application in written form.					
		☐ filed together with the international application in computer readable form.						
		☐ furnished subsequently to this Authority in written form.						
	furnished subsequently to this Authority in computer readable form.							
		The statement that the suin the international applic	rbsequently furnished written sequation as filed has been furnished.	ence listing does no	ot go beyond the	disclosure		
	. 🗆 .	The statement that the inlisting has been furnished	formation recorded in computer re I.	adable form is ident	tical to the writte	n sequence		
4.	The	e amendments have result	ed in the cancellation of:					
		the description, pag						
		the claims, Nos						
		the drawings, she	ets:					

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US 03/34736

5.	This report has been established as if (some of) the amendments had not been made, since they have
	been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims Claims	6,13,20 1-5,7-12,14-19,21-26	<b>.</b>
Inventive step (IS)	Yes: No:	Claims Claims	1-26	
Industrial applicability (IA)	Yes: No:	Claims Claims	1-26	

2. Citations and explanations

see separate sheet

### **EXAMINATION REPORT - SEPARATE SHEET**

#### Re Item V

Reasoned statement under Article 35(2)with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents: 1.

D1: US-A-3,434,915

D2: US-A-4,293,615

D3: DE 199 38 159 A1

D4: EP 1 281 690 A1 & WO 01/064598 (D4a)

D4 is not pre-published (cf. Rule 64.3 and 70.10 PCT) but claims the priority of D4a which satisfies the conditions of Art. 33 PCT.

Assuming that the respective disclosure is equivalent, reference will be made to D4a via D4 hereinafter.

The international application concerns a poly(vinyl butyral) (PVB) interlayer the PVB of which has a hydroxyl number of from about 17 to about 23 and contains a single plasticizer in an amount of from about 40 to about 50 pph.

The term "hydroxyl number" is understood to refer to the weight percentage of vinyl alcohol units in the PVB such as defined in ASTM D1396.

The object of the invention is to provide an interlayer for sound attenuating glazings in vehicles and for architectural purposes at or in buildings.

### Art. 33(2) and (3) PCT

D1 and D2 are assigned to the Applicants and were filed without paying attention 3.1 to sound deadening properties of a glazing interlayer.

The hydroxyl number of the PVB however falls within the presently claimed range and an amount of from 45 to 50 pph of plasticizer as disclosed in D2 and of about 45 pph as disclosed in D1 satisfies the conditions for the amount of plasticizer. required by the present claims.

It is observed that D1 focuses on triethylene glycol di-(2-ethyl butyrate) (3GH) as

the plasticizer and that the propylene oxide oligomers disclosed in D2 are outside the scope of present dependent claims 4 to 6 and the corresponding dependent claims 11 to 13 and 18 to 20, whereas 3GH satisfies the requirements of the enumerated dependent claims except for the fact that it is not 3GO.

3.2 For a person skilled in the art of glazings, it is apparent that noise attenuating glazings not only find use for motor vehicles, trains or aeroplanes, but are also useful for architectural purposes.

Therefore, the subject-matter of present claims 8 to 26 is obvious once the teaching of the particular composition of the interlayer is available.

The description already acknowledges the teaching of D3, wherein a blend of plasticisers is used in order to remove the coincidence in the frequency range of from 1,000 to 2,500 Hz which is a typical range within which laminated glazing transmit vibrations.

The result achieved in present Example 1 would appear to not excel over the result obtained in D3, contrary what is promised in the title of the present application. 🕟

3.3 One could accept that it is easier to use one plasticizer only. However, it is not apparent from the specification which plasticizer gives the best benefit.

This conclusion is derived from comparison of the paragraph in lines 21 to 27 at page 3 and dependent claim 7.

Whereas according to the description 4G7 is the preferred plasticizer, which fact also emanates from Examples 1 to 4, dependent claim 7 (and the corresponding claims which depend on claims 8 and 15) point out 3GO to be the preferred plasticizer, which however was only used in the Comparative Example of the specification (cf. p.8, II.19-25).

3.4 The hydroxyl number alone is not decisive.

Sound deadening is also influenced by the degree of saponification as can be

Table 3 at page 20 of D4 demonstrates the influence of residual acetate content in layer (B).

Layer (A) comprises a PVB resin which was butyralised to 68.9 mol% and which

**EXAMINATION REPORT - SEPARATE SHEET** 

comprises 0.9 mol% residual acetate groups (cf. Example 10, lines 5 and 6 at the top of page 17).

Taking into account that a molar percentage of the remaining free vinyl alcoholgroups is higher than the percentage by weight which determines the hydroxyl number, the corresponding figures in weight-% can be computed.

Starting from a molar percentage of 30.2 of vinyl alcohol groups, the result is 22.9 wt.-%, corresponding to a hydroxyl number which falls within the ambit of present claim 1.

- 4.1 Summing up, the invention does not provide a better result than the closest state of prior art and what is claimed does not correspond to what is disclosed in the description (deficiency under Art. 6 PCT).
- The subject-matter of the claims is obvious (Article 33(3) PCT). 4.2
- The description only partially reflects the most pertinent state of prior art (Rule --5.1(a) (ii) PCT).





Europäisches Patentamt



Office européen des brevets

Generaldirektion 2

Directorate General 2

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Datum/Date

29-10-2004

Zeichen/Ref./Réf.

Anmeldung Nr /Application No /Demande no /Patent Nr /Patent No /Brevet no.

03705702.3-2221

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

Hewlett-Packard Company

Notification of the data mentioned in Article 128(5) EPC pursuant to Rule 17(3) EPC  $\,$ 

In the above-identified patent application you are designated as inventor/co-inventor.

Pursuant to Rule 17(3) EPC the data-as mentioned in Article 128(5) EPC

are notified herewith:

DATE OF FILING :

09.01.03

PRIORITY

US/18.01.02/US 51263

TITLE

ELECTRONIC COMMERCE SYSTEM INCLUDING CUSTOMIZED CATALOG

HAVING ENCODED INFORMATION

DESIGNATED STATES:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU

IE IT LI LU MC

NL SE SI SK TR PT

RECEIVING SECTION

